
IT Plan – Agency Submitted

244 NORTH DAKOTA FOREST SERVICE

Version: 2007-B-01-00244

Project: Infrastructure

Date: 10/12/2006

Time: 10:32:22 AM

Page 1 of 14

NORTH DAKOTA FOREST SERVICE

Information Technology Plan FY 2007 - 2009

June 1, 2006

IT Contact Information

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IT Overview

Description and Mission

The North Dakota Forest Service (NDFS) administers forestry programs state-wide. The agency operates a nursery at Towner specializing in the production of conifer (evergreen) tree stock. The nursery is the sole supplier of evergreen seedlings in North Dakota. Technical and financial assistance relating to the management of private forest lands, state forest lands, urban and community forests, tree planting and wildland fire protection are provided by the agency. The North Dakota Forest Service also owns and manages approximately 13,278 acres of state forest lands.

Mission Statement

“To care for, protect and improve forest and natural resources to enhance the quality of life for present and future generations.”

Organizational Structure

IT Plan – Agency Submitted

244 NORTH DAKOTA FOREST SERVICE

Version: 2007-B-01-00244

Project: Infrastructure

Date: 10/12/2006

Time: 10:32:22 AM

Page 2 of 14

The North Dakota Forest Service is organized under the North Dakota Board of Higher Education and has been a part of the higher education system since 1907. The agency is administered by a State Forester who reports to the president of North Dakota State University at Fargo.

The agency is authorized 17.97 FTE from appropriated sources and 14.03 FTE from non-appropriated sources. It is comprised of six program coordination areas including Community Forestry, Fire Management, Forest Resource Management, Information and Education, Sustainable Forestry and Tree Production. Public forestry services are delivered by the agency through eight forestry offices. The agency's headquarters is located in Bottineau.

Statutory Authority

Authority is granted to the State Forester under North Dakota Century Code 4-19 to meet the forestry needs in the state by:

- Raising and distributing acclimated forest tree planting stock for landowners;
- Promoting practical forestry to landowners, community groups, schools and other organizations interested in forestry;
- Encouraging the development, use and wise stewardship of forest resources;
- Providing assistance to landowners, producers, communities and public bodies relating to forestry, reforestation, protection of forest resources, prevention and suppression of fires, planting trees and shrubs, and the growing, harvesting, marketing and management of forest resources;
- Acquiring, when appropriate, forest lands that are suited for state forest purposes and managing these lands for the benefit of the citizens of the State.

Funding Sources

Funding for the operation of the North Dakota Forest Service is provided by the State General Fund, federal sources and other income generated from tree sales.

Long Range Strategic Planning

IT Plan – Agency Submitted

244 NORTH DAKOTA FOREST SERVICE

Version: 2007-B-01-00244

Project: Infrastructure

Date: 10/12/2006

Time: 10:32:22 AM

Page 3 of 14

The North Dakota Forest Service implemented a long-range strategic planning process in November 1995. The North Dakota Forest Service's long-range strategic plan is based on input from the agency's six program coordination areas and external stakeholders. The plan outlines long-range goals and objectives, specific future initiatives, program priorities, implementation time-frames and necessary resources.

The leadership and responsibility for implementing the plan rests with the agency's six program coordination teams. Short-range annual work plans are used to guide the teams' efforts and insure implementation of the long-range strategic plan. The annual work plan is the tool that bridges the gap between planning and operations. Customer demand, program priorities and budget resources greatly influence the agency's annual directions.

Mission Statement for Continuous Improvement Program

“The North Dakota Forest Service Continuous Improvement Program will:

- Focus on customer's needs and expectations;
- Seek continuous improvements that lead to higher quality products and services;
- Seek to involve everyone and develop human potential; and
- Participate in societal learning to avoid re-invention of methods, to implement quality practices more quickly, and to create a quality culture in which to do business.”

Technology Plan Overview

The North Dakota Forest Service developed an Information Technology Plan in December 1997 and updated the plan in November 2001; June 2004 and June 2006. The planning process included an evaluation of current systems as well as the future information systems for the agency. The needs of customers, partners, internal staff and other state, regional and national agencies were considered in developing the information systems strategies.

The NDFS Information Technology Plan calls for the replacement of computers and upgrading all systems to include: Windows XP or newer and Microsoft Office Suite 2003 or newer. Many computers and software systems currently utilized are outdated and can not support services that must be provided in the future. The plan includes a replacement schedule for 34 desk-top computers, 11 lap-top computer and upgrading software every 4th fiscal year. Peripherals are replaced as needed or every 8th fiscal year.

During the current biennium, \$41,000 was needed for computers, printers, training and software updates. These needs were funded from appropriated and non-appropriated sources. The agency's technology needs for the 2007-2009 biennium are \$39,000 and funding sources will

IT Plan – Agency Submitted

244 NORTH DAKOTA FOREST SERVICE

Version: 2007-B-01-00244

Project: Infrastructure

Date: 10/12/2006

Time: 10:32:22 AM

Page 4 of 14

remain the same. See Appendix B for IT budget. Agency information for “EDUCAUSE Core Data Survey” and “EDUCAUSE Current Issues Survey” have been included with North Dakota State University’s report.

The ND Forest Service Headquarters is located on the MSU-Bottineau campus. Access to the HECN network is supported and maintained by MSU-Bottineau. Field offices at Bismarck, Bottineau, Carrington, Fargo, Grafton, Lisbon, Towner and Walhalla have PC access to the Internet and e-mail through local phone companies and Informational Technology Division (ITD). Limited technical support for NDFS offices is provided by the NDSU Information and Technology Center.

In the 2007-2009 biennium, the NDFS will continue to maintain and update their systems as outlined in the technology plan.

Technology Goals & Objectives

➤ Customer Focused

The North Dakota Forest Service has a web page, which is maintained by a NDFS Web Team and lead by a Community Forestry Specialist. The web page allows for customers to view the technical services and grants administered by the North Dakota Forest Service. The team regularly reviews and updates the web page. Some grant applications are on-line.

➤ Efficient

Several North Dakota Forest Service offices are co-located with other agencies to provide an efficient delivery of services at a low cost. Offices located in Bismarck, Bottineau, Carrington, Fargo and Grafton share facilities and computer services.

➤ Well Managed

NDFS staff utilizes information technology to:

- provide landowner assistance,
- manage forest resources,
- prevent and suppress wildfires, and
- grow and market trees and shrubs.

IT Plan – Agency Submitted

244 NORTH DAKOTA FOREST SERVICE

Version: 2007-B-01-00244

Project: **Infrastructure**

Date: 10/12/2006

Time: 10:32:22 AM

Page 5 of 14

Information technology is also used in providing grant information to communities through Interactive Video Network (IVN) workshops. The IVN also provides a means for staff training and educational opportunities for staff. The Internet is used in staff recruitment and provides an excellent educational resource.

The ND Forest Service utilizes GIS technology to manage North Dakota forest resources. GIS technology provides the means to map and manage forested areas. Computers and GIS software were purchased in 1998 and GIS training began in 1999. Training is on-going. Current federal funding mandates GIS mapped management plans.

➤ Leadership For Developing A Shared Infrastructure

Staff is encouraged to expand or enhance current programs through technology. Training and educational resources have been expanded through technology.

- Expanded web page to contain grant applications.
- Expanded computer training available through the Interactive Video Network (IVN) and NDSU's NetOp.
- Expanded access to forestry resources through the Internet.

➤ Alignment with NDFS Long Range Strategic Plan

The North Dakota Forest Service implemented a long-range strategic planning process in November 1995. The long range strategic plan is based on input from the agency's six program coordination areas and external stakeholders. The plan outlines long-range goals and objectives, specific future initiatives, program priorities, implementation time-frames and necessary resources.

The leadership and responsibility for implementing the plan rests with the agency's six program coordination teams. Short-range annual work plans are used to guide the teams' efforts and insure implementation of the long-range strategic plan. The annual work plan is the tool that bridges the gap between planning and operations. Customer demand, program priorities and budget resources greatly influence the agency's annual directions.

The North Dakota Forest Service's Technology Plan is incorporated into the agency's long range strategic plan under the "Facilities and Equipment" section. This section states:

- Technology needs and policies are identified in the NDFS Information Technology (IT) Plan. The plan outlines replacement schedules and standardized software to facilitate computer compatibility. The agency will also continue to explore emerging technology and evaluate for practical application. Communication options including the Internet, IVN and other technology will be expanded to reach a broader cross section of North Dakotans.

IT Plan – Agency Submitted

244 NORTH DAKOTA FOREST SERVICE

Version: 2007-B-01-00244

Project: Infrastructure

Date: 10/12/2006

Time: 10:32:22 AM

Page 6 of 14

Technology upgrades are also noted under the “Funding and Budgets” section as a priority.

The plan includes the following goals, objectives and accomplishments.

Goal #1 - The agency will have modern, integrated information technology (IT) tools that are well supported.

Objectives:

- Adopt office information tools that are standardized, integrated and well supported (including training and documentation).
- Define and implement a structured training plan for the agency that covers both new-hire and continuing in-service information technology and business training.
- Analyze business processes. Implement changes and adopt appropriate technologies to improve efficiency and customer service.
- Expand GIS capabilities.
- Replace computers according to schedule every 4th fiscal year and peripherals every 8 fiscal years.
- Update software every 2-3 years.

Accomplishments:

The agency currently has met these objectives or the objectives are on-going.

Goal #2 - The agency will have well-documented information technology (IT) procedures and programs.

Objectives:

- The agency follows NDSU’s well-documented safety and usage policies and procedures that are consistently applied.
- NDUS and NDSU have developed a computer and network usage policy that encompasses all IT aspects.

Accomplishments:

The agency has an IT contact who is a member of the NDSU IT Liaison Committee. This committee provides a forum to share IT problems and solutions while also providing training and research.

Goal #3 - The agency will have access to information on the Internet, HECN and GIS.

Objectives:

IT Plan – Agency Submitted

244 NORTH DAKOTA FOREST SERVICE

Version: 2007-B-01-00244

Project: Infrastructure

Date: 10/12/2006

Time: 10:32:22 AM

Page 7 of 14

- Use of the World Wide Web for dissemination of agency information with internal partners, external partners and customers.
- Expand Internet and HECN connectivity for all field office computers.
- Promote technology training and electronic sharing of information.
- Expand GIS capabilities and secure training.
- Utilize video conferencing when appropriate.

Accomplishments:

The agency has met these objectives and training is on-going. The agency has a web team which meets regularly to review and update the web page.

Hardware

The North Dakota Forest Service has 34 desk-top and 11 lap-top computers and peripherals located at 8 office locations across the state. No networks are owned or operated by the agency. One server is planned to assist with the state fire program. The number one agency goal is to establish and maintain well supported IT tools including training. The agency has several outdated computers and training opportunities need to be expanded.

Equipment funding has remained low for the past several bienniums requiring federal dollars to support the agency IT Plan.

See Appendix A for a complete listing of agency hardware.

Telecommunications

No networks are owned or operated by the agency. Access to networks is gained through local phone companies and ITD. The agency does not foresee any substantial increase in additional telephone lines or service.

The North Dakota Forest Service uses the State Radio for emergencies and fire suppression. The agency has 9 mobile radios, which are used in fire suppression and law enforcement.

IT Plan – Agency Submitted

244 NORTH DAKOTA FOREST SERVICE

Version: 2007-B-01-00244

Project: Infrastructure

Date: 10/12/2006

Time: 10:32:22 AM

Page 8 of 14

The North Dakota Forest Service has no plans to implement an agency network. Four offices located in Bismarck, Bottineau, Carrington, Fargo and Lisbon share services or are provided services by ITD. Four other offices located in Bottineau, Grafton, Towner and Walhalla are served by local Internet Service Providers (ISP).

Software

The North Dakota Forest Service standardized software use in 1997 and continue to revise these standards as needed. The agency requires all offices to use the following software: Microsoft Office 2003 or newer, Windows XP Professional or newer, and an antivirus program (McAfee). Optional additional software includes: Corel WordPerfect 11 and ArcView 8.2. Software is scheduled to be updated every two or three years. All computers are required to be configured for Microsoft daily automatic updates.

The agency has only one business software application located at the Towner State Nursery.

- Application Name – Giant Oak
- Application Description – Business application for nurseries
- Production Date – November 1999
- Date of Last Upgrade – 2004
- Replacement Date – Unknown
- Original Cost - \$2,000
- Developer / Vendor – Sondrell Business Services – Sole Source
- Life Expectancy – 8 years
- Maintenance Cost - \$-0- (included in the purchase cost)
- Estimated Replacement Cost - \$3,000
- Operating System Required – Microsoft 98 or XP
- Database System Required – Microsoft Access
- Language the application was developed in – Access Basic
- Maintenance Vendor – Sondrell Business Services

IT Plan – Agency Submitted

244 NORTH DAKOTA FOREST SERVICE

Version: 2007-B-01-00244

Project: Infrastructure

Date: 10/12/2006

Time: 10:32:22 AM

Page 9 of 14

Training

Technology training is necessary in maintaining nursery operations and services provided to North Dakota communities. The State Forester encourages technology training within program budgets and program coordinators budget training dollars accordingly.

Program coordinators are responsible for evaluating employee/team technology skills and aligning training needs to program budgets. When software standards are revised, agency training is included during staff meetings. Additional training opportunities are offered by North Dakota State University and other state agencies as well as seminars within the private sector.

Training opportunities are determined between employees and supervisors during annual responsibility reviews. New employees attend software training sessions during the course of their orientation. Agency wide training sessions are conducted whenever technology policies or procedures are revised which include new or updated software. Staff is also encouraged to attend computer hardware and software courses offered by colleges. Technology courses directly relating to job descriptions are covered by tuition waivers. The State Forester recommends employee training sessions 1 - 2 times each year for all staff. Technology training opportunities are also incorporated within bi-annual staff meetings.

Future technology training opportunities will be expanded to include IVN training and web page management offered by the North Dakota State University technology staff; and advanced GIS training.

Accomplishments

The North Dakota Forest Service has maintained or exceeded our required replacement schedule for computers and software. An additional quality team was established to monitor and update our web page. Team members also received software training for maintaining and editing the web site.

Other accomplishments were:

- Living Snow Fence sites, landowner management plans, Red River Riparian Projects, fire and community maps were completed using GIS.
- Cooperative Fire Protection Program databases were established for North Dakota.

IT Plan – Agency Submitted

244 NORTH DAKOTA FOREST SERVICE

Version: 2007-B-01-00244

Project: Infrastructure

Date: 10/12/2006

Time: 10:32:22 AM

Page 10 of 14

IT Plan – Agency Submitted

244 NORTH DAKOTA FOREST SERVICE

Version: 2007-B-01-00244

Project: Infrastructure

Date: 10/12/2006

Time: 10:32:22 AM

Page 11 of 14

Agency IT Plan Contact Data

Agency Technology Goals And Objectives

IT Plan – Agency Submitted

244 NORTH DAKOTA FOREST SERVICE

Version: 2007-B-01-00244

Project: Infrastructure

Date: 10/12/2006

Time: 10:32:22 AM

Page 12 of 14

1. If applicable, describe the reason for any extraordinary increase or decrease in your infrastructure costs.

No major changes are planned for 2007-09

2. Total number of desktop computers: 34
Number of desktops for which you are requesting replacement funding: 3
Average replacement cost/desktop: 1,500

3. Total number of laptop computers: 13
Number of laptops for which you are requesting replacement funding: 1
Average replacement cost/laptop: 2,000

What state planning region are these desktop/laptop computers located?

Region 1 0 **2** 22 **3** 0 **4** 5 **5** 5 **6** 2 **7** 13 **8** 0

4. What percentage of these pcs are running the following operating systems:

(total should be equal to 100%)

Windows 98 5 %
Windows NT 0 %
Windows 2000 20 %
Windows XP 75 %
Other 0 %

5. What additional expenditures are being paid out of non-appropriated funds? 21,000

Please explain:

Ten additional desktop computers and three laptops will be replaced using grand funds.

Agency Technology Activities

Goal #1 - The agency will have modern, integrated information technology (IT) tools that are well supported.

Objectives:

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IT Plan – Agency Submitted

244 NORTH DAKOTA FOREST SERVICE

Version: 2007-B-01-00244

Project: Infrastructure

Date: 10/12/2006

Time: 10:32:22 AM

Page 13 of 14

Goal #2 - The agency will have well-documented information technology (IT) procedures and programs.

Objectives:

- The agency follows NDSU's well-documented safety and usage policies and procedures that are consistently applied.
- NDUS and NDSU have developed a computer and network usage policy that encompasses all IT aspects.

Accomplishments:

The agency has an IT contact who is a member of the NDSU IT Liaison Committee. This committee provides a forum to share IT problems and solutions while also providing training and research.

Goal #3 - The agency will have access to information on the Internet, HECN and GIS.

Objectives:

- Use of the World Wide Web for dissemination of agency information with internal partners, external partners and customers.
- Expand Internet and HECN connectivity for all field office computers.
- Promote technology training and electronic sharing of information.
- Expand GIS capabilities and secure training.
- Utilize video conferencing when appropriate.

Accomplishments:

The agency has met these objectives and training is on-going. The agency has a web team which meets regularly to review and update the web page.

IT Plan – Agency Submitted

244 NORTH DAKOTA FOREST SERVICE

Version: 2007-B-01-00244

Project: Infrastructure

Date: 10/12/2006

Time: 10:32:22 AM

Page 14 of 14

		CURRENT APPROPRIATION	BUDGET REQUEST	OPTIONAL ADJUSTMENTS	REQUEST PLUS OPTIONALS	SUBSEQUENT BIENNIUM
IT5310	IT SOFTWARE AND SUPPLIES	\$15,556	\$20,000	\$0	\$20,000	\$22,000
IT5510	IT EQUIPMENT UNDER \$5000	\$54,568	\$35,500	\$0	\$35,500	\$37,275
IT6020	IT COMMUNICATIONS	\$56,152	\$57,275	\$0	\$57,275	\$60,000
IT6030	IT CONTRACT SERVICES & REPAIRS	\$1,084	\$1,500	\$0	\$1,500	\$2,000
	Total Budget:	\$127,360	\$114,275	\$0	\$114,275	\$121,275
001	STATE GENERAL FUND	\$25,472	\$22,855	\$0	\$22,855	\$24,255
FED1	IT FEDERAL FUNDS	\$101,888	\$91,420	\$0	\$91,420	\$97,020
	Total Funding:	\$127,360	\$114,275	\$0	\$114,275	\$121,275